

Appendix A Table 2 to rule 901:10-2-14: Land application restrictions and setbacks

Land Application Restrictions

	1	2	3	4
	Staging Areas and Stockpiles (10)	Surface Application	Winter Applications Frozen or Snow Covered Ground (1)	Surface Incorporation within 24 Hours OR Direct Injection
Class V wells, sinkholes:	300'	300'	300'	100'
Surface Waters of the State (7):	300'	35' veg cover, 100' (2)	35' veg. cover, 200' (8)	35' veg. cover, 100'(2)
Wells:	300'	300'	300'	100'
Bedrock:	> 3' from bedrock	none	none	none
Public Surface Drinking Water Intake:	1500'	300'	300'	300'
Springs:	300'	300'	300'	300'
Neighboring residences:	500'	300'	300'	100'
Flooding/flood plains/floodways (3):	do not stockpile	do not apply	do not apply	permissible (3)
Slope (4):	0-6%	>15% see note 5	If > 6% see note 1	>15% see note 5
Field Surface Furrows(6):	300'	35' veg cover, 100' (2) or 35' see note 9	200'	none
Maximum Application Rate:	Liquid Manure - Based on Appendix B (AWC Chart) & Appendix F (Most Limiting Nutrient Chart). Solid Manure - Based on Appendix F (Most Limiting Nutrient Chart).			

Note (1): All winter surface applications must have prior approval from the Ohio Department of Agriculture. Application on frozen and snow covered soil is not recommended. However, if manure application becomes necessary on frozen or snow covered soils, only limited quantities of manure shall be applied to address waste storage limitations until non frozen soils are available for manure application. If frozen or snow covered ground application becomes necessary, applications are to be applied only if ALL the following criteria are met:

- a. Application rate is limited to 10 wet tons/acre for solid manure more than 50% moisture and 5 wet tons for manure less than 50% moisture. For liquid manure the application rate is limited to 5000 gallons/acre.
- b. Applications are to be made on land with at least 90% surface residue cover (e.g. good quality hay or pasture field, all corn grain residue remaining after harvest, all wheat residue cover remaining after harvest).
- c. Manure shall not be applied on more than 20 contiguous acres. Contiguous areas for application are to be separated by a break of at least 200 feet. Utilize those areas for manure application that are the farthest from streams, ditches, waterways, surface water, etc. (areas that present the least runoff potential and are farthest from surface water).
- d. Increase the application setback distance to 200 feet "minimum" from all grassed waterways, surface drainage ditches, streams, water bodies and field surface furrows. This distance may need to be further increased due to local conditions.
- e. The rate of application shall not exceed the rates specified in Table 4 - Determining The Most Limiting Manure Application Rates for winter application.
- f. Additional winter application criteria for fields with significant slopes more than 6% - Manure shall be applied in alternating strips 60 to 200 feet wide generally on the contour, or in the case of contour strips on the alternating strips.

Note (2): Either a 35' wide vegetative buffer strip must be present or a total setback of 100' must be maintained. As a compliance alternative, the concentrated animal feeding operation may demonstrate that a setback or buffer is not necessary because implementation of alternative conservation practices or field-specific conditions will provide pollutant reductions equivalent or better than the reductions that would be achieved by the one hundred foot setback or a thirty five foot vegetative buffer. Buffer strip is defined in OAC 901:10-1-0.

Note (3): No applications during expected flooding season as reported in Appendix A, Table 1.

Note (4): Must have < 5 ton/ac yearly average soil loss to perform surface manure applications.

Note (5): Manures are not to be applied to cropland over 15% slope or to pastures/hayland over 20% slope unless ONE of the following precautions are taken:

- a. Immediate incorporation or injection with operations done on the contour, UNLESS the field has 80% ground cover (residue or canopy).
- b. Applications are timed during periods of lower runoff and/or rainfall (May 20th - October 15th).
- c. Split applications are made (separated by rainfall events) with single applications not exceeding 10 wet tons/ac or 5000 gal/ac.
- d. The field is established and managed in contour strips with alternated strips in grass or legume.

Note (6): Applications can be through field surface furrows if criteria in Appendix A, How to Use Appendices are followed.

Note (7): Refer to OAC 901:10-1-01 for the definition of "Surface waters of the state."

Note (8): The first setback refers to a vegetative buffer strip that must be maintained while the second refers to the total setback distance. Buffer strip is defined in OAC 901:10-1-01.

Note (9): A 35' buffer without vegetation may be approved by the Director based on prior submittal of a compliance alternative for the specific land application area, in accordance with OAC 901:10-2-14(C)(3).

Note (10): Staging area(s) is a site used for placement of solid manure or transferring of liquid manure to facilitate land application. Any solid manure that is staged for more than 15 days will be considered a stockpile. Staging areas and stockpiles shall not discharge to waters of the State.

Source: USDA-NRCS (2003), Field Office Technical Guide-Conservation Practice Standard, 633, Columbus, Ohio.